

The following Listing of Claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Currently Amended) A gas purifier for purifying gas including contaminants, the gas purifier ~~being characterized by:~~ comprising:

an adsorption removal device ~~(B), which includes a regenerable adsorbent (9)~~ for adsorbing contaminants from non-purified air ~~(W')~~ and that includes a regenerable adsorbent that separates the adsorbed contaminants through a regeneration process[[,]]; and

a gas purification unit ~~(A), which performs for~~ gas-liquid contact with a porous film to ~~separate and~~ remove contaminants from the non-purified air ~~(W')~~ and to separate the contaminants into a liquid, are the adsorption removal device and the gas purification unit being arranged in an air passage (Q).

2. (Currently Amended) The gas purifier according to claim 1, ~~being~~ characterized in that: wherein

the gas purification unit ~~(A)~~ is arranged upstream to the adsorption removal device ~~(B)~~ and arranged in series with the adsorption removal device.

3. (Currently Amended) The gas purifier according to claim 1, ~~being~~ characterized in that: wherein

the gas purification unit ~~(A)~~ is arranged downstream to the adsorption removal device ~~(B)~~ and arranged in series with the adsorption removal device.

4. (Currently Amended) The gas purifier according to ~~any one of claims~~ claim 1
~~to 3, being characterized in that:~~ wherein

the gas purification unit (A) is formed to enable passage of some air circulating
through the air passage (Q).

5. (Currently Amended) The gas purifier according to claim 3, ~~characterized in~~
~~that~~ wherein

the adsorption removal device (B) is formed to enable passage of some air circulating
through the air passage (Q).

6. (Currently Amended) The gas purifier according to ~~any one of claims~~ claim 1
~~to 5, being characterized in that:~~ wherein

the adsorption removal device (B) includes a moving ~~means~~ device for moving the
adsorbent (9) to a purification position (P1) at which the non-purified air (W1) is purified and
a regeneration position (P2) at which the adsorbed contaminants are separated, and a
regenerating ~~means~~ device for separating contaminants from the adsorbent (9) at the
regeneration position (P2).

7. (Currently Amended) The gas purifier according to claim 6, ~~being~~
~~characterized in that:~~ wherein

the adsorbent is formed by a honeycomb rotor made of a hydrophobic zeolite, and the moving ~~means~~ device is formed by a motor ~~(10)~~ for rotating and driving the honeycomb rotor ~~(9)~~.

8. (Currently Amended) The gas purifier according to ~~any one of claims~~ claim 1 to 7, being characterized in that: wherein

the adsorbent ~~(9)~~ uses some of purified air ~~(W)~~ obtained by passage through the adsorbent as air for the regeneration process, and a passage ~~(16)~~ returns some or all of regenerated discharged air obtained through the regeneration process to an air supply portion of the gas purification unit.

9. (Currently Amended) The gas purifier according to claim 7 ~~or 8, being~~ characterized by: further comprising

an air amount control mechanism configured for controlling the air amount of cooling air for cooling the honeycomb rotor ~~(9)~~.

10. (Currently Amended) The gas purifier according to any one of claims 7 ~~to 9, being characterized by: further comprising~~

a sensor ~~(21)~~ configured for detecting a rotation angle or a rotation speed of the honeycomb rotor ~~(9)~~, ~~wherein~~ the rotation speed of the honeycomb rotor ~~(9)~~ is being controlled based on a detection value of the sensor ~~(21)~~.

11. (Currently Amended) The gas purifier according to claim 10, ~~being~~
~~characterized by:~~ further comprising
an organic substance concentration sensor (22) configured for detecting the organic
substance concentration in the regenerated discharged air of the honeycomb rotor (9),
~~wherein~~ the rotation speed of the honeycomb rotor (9) ~~is~~ being controlled based on a
detection value of the organic substance concentration sensor (22).

12. (Currently Amended) The gas purifier according to ~~any one of claims~~ claim 1
~~to 11, being characterized in that:~~ wherein
the gas purification unit (A) includes a tank (1) containing pure water and a plurality
of pipes (2) ~~of~~ formed from porous films extending in the tank (1).

13. (Currently Amended) The gas purifier according to ~~any one of claims~~ claim 1
~~to 11, being characterized in that:~~ wherein
the gas purification unit (A) is formed by stacking film elements (29) of porous films,
~~wherein~~ and pure water contacts the non-purified air (W') through the film elements (29).

14. (Currently Amended) The gas purifier according to claim 12 ~~or 13, being~~
~~characterized by:~~ further comprising
a temperature control mechanism (7) configured for controlling ~~the~~ a temperature of
the pure water.

15. (Currently Amended) The gas purifier according to ~~any one of claims~~ claim
~~12 to 14, being characterized by: further comprising~~
a water regeneration mechanism (42) configured for regenerating water circulating
through the gas purification unit (A).

16. (Currently Amended) The gas purifier according to ~~any one of claims~~ claim
~~12 to 15, being characterized in that: wherein~~
discharged water of a device (X), which is supplied with the purified air (W) obtained
by the gas purifier, is used as the pure water.

17. (Currently Amended) The gas purifier according to ~~any one of claims~~ claim
~~12 to 16, being characterized by: further comprising~~
a pure water circulating ~~means (3)~~ part configured for circulating the pure water;
a pure water supplying ~~means (4)~~ part configured for supplying the pure water
circulating ~~means (3)~~ part configured with new pure water;
a pure water discharging ~~means (5)~~ part configured for discharging used pure water
from the pure water circulating ~~means (3)~~ part; and
an ion concentration sensor configured for detecting the ion concentration in the pure
water, ~~wherein the~~ a circulation amount and ~~the~~ a supplied and discharged amount of the pure
water is being controlled based on a detection value of the ion concentration sensor (23).